

Process Controller with Setpoint Programmer

1/16 DIN - 48 x 48

Linea M5

Quick Guide • ISTR-FM5ENG02



ASCON TECNOLOGIC

viale Indipendenza 56, 27029 - Vigevano (PV)
Tel.: +39 0381 698 71; Fax: +39 0381 698 730
internet site: www.ascontecnologic.com
E-mail: sales@ascontecnologic.com

Model Code

The product code indicates the specific hardware configuration of the instrument, that can be modified by specialized engineers only.

Line Basic Accessories

Model: M5 A1 C D - E 9 0 0

Line	M	5
Power supply	A	
100...240Vac (-15...+10%)	3	
24Vac (-25...+12%) or 24Vdc (-15....+25%)	5	
Serial Comm's. Options	C D	
Not fitted	None [2]	0 0
	Feedback potentiometer [2]	0 1
	Aux. input	1
	Remote Setpoint [1]	0 2
	Current Transformer	0 3
	SSR drive/analogue	0 4
	SSR drive/analogue + Rem. SP [1][2]	0 5
RS485 Modbus/Jbus protocol	5 0	
	Feedback potentiometer [2]	5 1
	Aux. input	5 2
	Remote Setpoint [1]	5 3
	Current Transformer	5 4
Setpoint Programmer	E	
Not fitted	0	
Present	4	

[1] Not available with Setpoint programmer installed (E = 1);

[2] Second digital input (IL2) not available.

Declaration of Conformity and Manual retrieval

M5 is panel mounting, Class II instrument. It has been designed with compliance to the European Directives.
All information about the controller use can be found in the User Manual: [MIU_M5_EN.pdf](#).

The Declaration of Conformity and the manual of the controller can be downloaded (free of charge) from the web-site: www.ascontecnologic.com

Once connected to the web-site, search:

M5

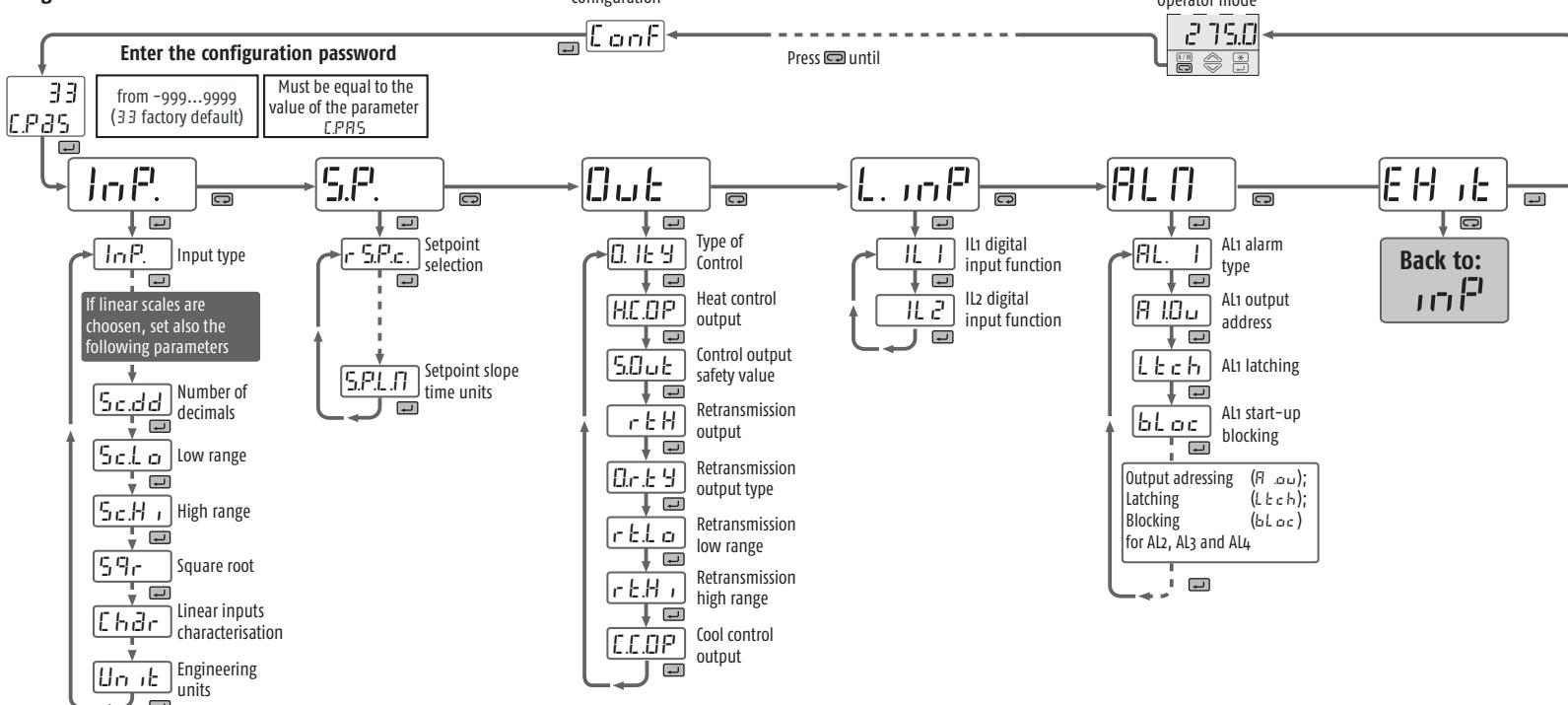
then click on M5 from the result list.

In the lower part of the product page (in any language) is present the download area with links to the documents available for the controller (in the available languages).

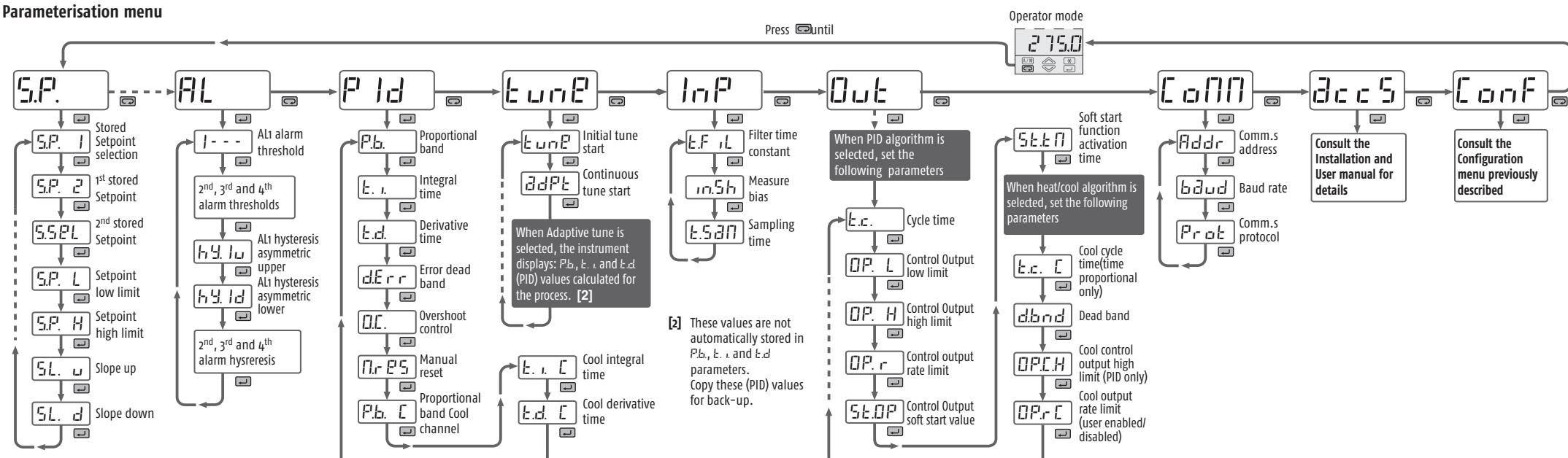
⚠ Warning!

- Whenever a failure or a malfunction of the device may cause dangerous situations for persons, things or animals, please remember that the plant must be equipped with additional devices which will guarantee safety.
- We warrant that the products will be free from defects in material and workmanship for 18 months from the date of delivery. Products and components that are subject to wear due to conditions of use, service life and misuse are not covered by this warranty.

Configuration menu



Parameterisation menu



Parameter list

The parameters pointed out with grey background are those necessary to configure the options and are NOT shown in the menus. All the parameters are fully described and explained in the user manual of the controller.

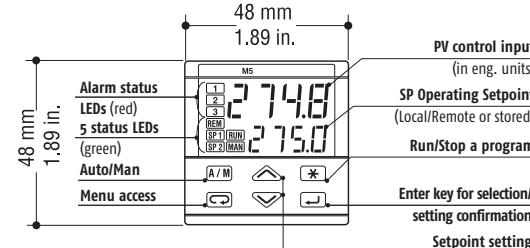
Configuration

Code	Parameter Name	Value	
		Default	User
InP.	Input type selection	0 - 10	
S.cdd	Number of decimals (0... 3)	0	
S.cLo	Low range	0	
S.cHi	High range	9999	
Sqr	Square root (0 = OFF, 1 = ON)	NO	
CHdr	Linear input characterization	NO	
Unit	Engineering units	NONE	
rSPc	Setpoint selection	LOC	
rS.In	Remote Setpoint input	4 - 20	
SPt.U	Time units and Setpoint slope	P.SEC	
D.IE.Y	Control type	PID	
H.C.OP	Control output (Heat)	OFF	
S.out	Control output safety value	OFF	
r.E.H	Retransmitted output selection	none	
D.E.H	Retransmission output	4-20	
r.E.L.O	Retransmission low range	0	
r.E.H.I	Retransmission high range	9999	
CCOP	Cool control output	OFF	
IL_	IL1 digital input function	OFF	

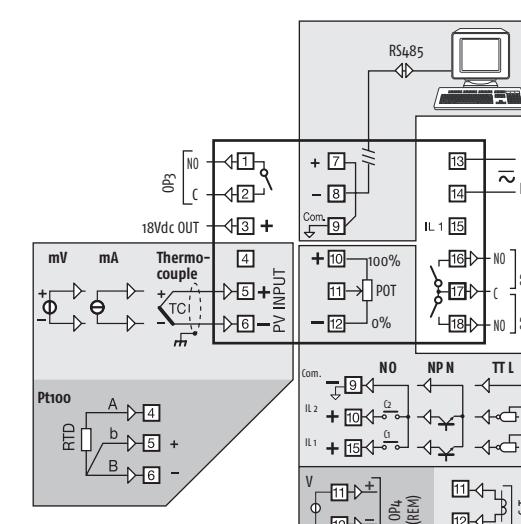
Code	Parameter Name	Value	
		Default	User
L_r	Setpoint selection	NONE	
S.P. _	nth stored Setpoint	0	
SSE.L	Stored setpoint selection		
S.P. L	Setpoint low limit	PV.L0	
S.P. H	Setpoint high limit	PV.HI	
SL_u	Setpoint ramp up	OFF	
SL_d	Setpoint ramp down	OFF	
r.E.R	Ratio remote Setpoint	1.00	
b.i35	Remote Setpoint Bias	0	
Program parameters (consult the Installation and user manual for details)			
I..._A	Al1 alarm threshold	0	

Description and dimensions

Depth: 110 mm



Electrical connections



Terminals

Pin connector	Fork-shape AMP165004 Ø 5.5 mm - 0.055 in. max.	Stripped wire L 5.5 mm - 0.21 in.
---------------	--	-----------------------------------

Code	Parameter Name	Value	
		Default	User
2...	Al2 alarm threshold	0	
3...	Al3 alarm threshold	0	
4...	Al4 alarm threshold	0	
hY.u	Aln alarm hysteresis Up	1	
hY.d	Aln alarm hysteresis Down	1	
Pb.	Proportional band	5.0	
E. i.	Integral time	60	
E. d.	Derivative time	12.0	
dErr	Error Dead Band	OFF	
DC.	Overshoot control	1.00	
MrPS	Manual Reset	50.0	
Pb.C	Cool proportional band	5.0	
E. i. C	Cool integral time	60	
E. d. C	Cool derivative time	12.0	
TunEP	Start/Stop One shot tuning	NO	
RdPte	Start/Stop Adaptive tuning	NO	
Pb.	Calculated Proportional band		
E. i.	Calculated Integral time		
E. d.	Calculated derivative time		
...	...		